

Briefly, the applicant wishes to point out the major features of the invention, which is a novel an integrated circuit module having common known good integrated circuit die. Selectable functions of the known good integrated circuit die are chosen during packaging of the known good integrated circuit die. Such 5 selectable functions allow a reduction of the variety of integrated circuit components particularly the module substrates during manufacturing and assembly. This allows reduction of the inventory of integrated circuit components required to be maintained at integrated circuit manufacturers, distributors, and integrated circuit users. The integrated circuit module has an known good 10 integrated circuit die to be mounted to the module. The known good integrated circuit die has multiple selectable input functions, multiple selectable output functions, common functions, a function selector, all are interconnected and connected to input/output pads.

The known good integrated circuit die is mounted to a second level 15 substrate. The second level substrate has wiring connections to the input/output pads of the known good integrated circuit die that select desired input functions and output functions. Further, the wiring connections on the second level substrate provide signal paths to transfer signals to the desired input function and 20 signals from the desired output function, and signals to and from the common functions. Also, the wiring connections form connections between the input/output pads and external circuitry. To select the desired input functions and the desired output functions, appropriate logic states are applied to input/output pads connected to function selector to configure a functional operation of the integrated

circuit module. The second level module substrate has connector pins to provide physical and electrical connections between the external circuitry and the wiring connections on the second level substrate.

There would be multiple second level modules, each module patterned to  
5 program the function selector to configure the operation desired of the known good integrated circuit die. An assembler of the module would have a single inventory of the known good integrated circuit die and multiple inventories of the second level modules, unlike the applicant's admitted prior art or Chia et al.

The applicant's admitted prior art describes a function selector **125** of Fig.  
10 1. However, the function selector is programmed by the integrated fuses **145a**, **145b**, and **145c**. There is no description for providing a common function, selectable function, and a function selector, all connected to be personalized dependent upon which second level modules the known good integrated circuit die is mounted. In fact the structure of Fig. 1 forces the retention of multiple types of  
15 the known good integrated circuit die, one for each type of fusing configuration.

Chia et al. describes a programmable substrate where the output pads of an integrated circuit are selectively wired to the pads of a second level substrate. The wiring of the second level module is configured by wire bonding particular traces that are connected to I/O pins. There is no teaching to a function selector  
20 on the integrated circuit die and configuring the integrated circuit by simply mounting the common known good integrated circuit die on different second level module designs.

The invention as claimed in amended Claims 1-51 is believed to be novel and patentable over applicants admitted prior art and Chia et al., because there is not sufficient basis for concluding that the combination of claimed elements would have been obvious to one skilled in the art. That is to say, there must be  
5 something in the prior art or line of reasoning to suggest that the combination of these various references is desirable. The applicant believe that there is no such basis for the combination. The applicant therefore request Examiner Peyton reconsider the rejection in view of these arguments.

Reconsideration of the objection to the specification is requested. The  
10 specification is amended to include those corrections suggested by the Examiner.

Allowance of all Claims is requested.

It is requested that should the Examiner Peyton not find that the Claims are now allowable, that he call the undersigned at (914) 452-5863 to over come any problems preventing allowance.

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Respectfully Submitted,



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